

Annex 1: Workplace capability and curriculum praxis

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This review draws on the findings of previous two action research inquiries with eSTEeM (Centre for Scholarship and Innovation at the OU), along with a literature review in providing a working understanding of core concepts underpinning the third inquiry – workplace capabilities and curriculum praxis.¹ The review ends with the definition of a lens used in the third of our inquiries - Transforming curriculum praxis and workplace capabilities: changing the way the game is played

Workplace capabilities (and education)

A capabilities approach derives from the work of Amartya Sen (1979; 1999). In short, capability is the freedom to choose and develop pathways of action that an individual has reasoned to value, rather than necessarily being confined to following existing ascribed paths of action.

Our use of the core concept of workplace capabilities invites attention to the notion of capabilities in the context of two sets of workplaces:

- (i) Workplace of students undertaking postgraduate study
- (ii) Workplace of academics and academic-support staff in a higher education setting

In this paper, we examine the workplace capabilities of students. We then move to our interest in the workplace capabilities of those in a higher education setting with the idea of curriculum praxis.

The concern for the capabilities of students links this work to the seeds of a capability movement in higher education which arose in the 1990s:

“A capability approach focuses on the capacity of individuals to participate in the formulation of their own developmental needs and those of the context in which they

¹ Two research projects: (i) [Enhancing Systems Thinking in Practice \(STiP\) in the Workplace](#) (Reynolds, Shah, Wedlock, Ison, and Blackmore, 2016); and (ii) [Framing Professional Competencies for Systems Thinking in Practice](#) (Reynolds, Shah, van Ameijde, Ison, and Blackmore, 2017)

work and live. A capability approach is developmental and is driven essentially by all the participants based on their capacity to manage their own learning, and their proven ability to bring about change in both [own needs and the context]. Capability includes but goes beyond the achievement of competence in present day situations to imagining the future and contributing to making it happen. Capability is about both fitness of and for purpose. A changing world needs people who can look ahead and act accordingly.” (Stephenson, 1998, p.3)

Stephenson (1998) emphasises that the capability approach is important for developing professionals who will need to engage with unfamiliar problems in unfamiliar contexts. This is a relevant concern for many disciplines and professions. For example, the case has been made for a capabilities approach in health education:

“Educators are therefore challenged to enable not just competence, but also capability. Capability ensures that the delivery of health care keeps up with its ever changing context. Education providers must offer an environment and process that enables individuals to develop sustainable abilities appropriate for a continuously evolving organisation” (Fraser and Greenhalgh, 2001 p.799)

Capabilities might be described as personal aptitudes (rather than attributes) enhancing an individual’s intrinsic ability to make appropriate choices in specific circumstances. Whilst a capabilities approach as described by Sen focuses on human agency, exercising appropriate capabilities involves addressing structural features that either help or hinder capabilities. Exercising freedom to choose pathways of action must be compliant with some reasoning to value such pathways. The reasoning can work at different structural levels of framing - individual, institutional, and global - each circumscribed by particular rationales or Worldviews.

Our previous eSTEEfM-funded projects (Reynolds et al, 2016; 2018) informed our own shift from competence to a capability approach with respect to our teaching and aspirations for human development through STiP. Post-study experiences of STiP students in the workplace revealed the challenge amongst STiP alumni encountering the realities of workplace practising of STiP beyond the safe-space provided by OU workplace learning. The idea of ‘STiP capabilities’ captured this set of aptitudes and challenged us as educators to look beyond simply teaching systems thinking ‘competencies’. Conceptually we found it helpful to clarify the difference between teaching ‘competence’, which we regard in terms of nurturing a systems thinking

literacy, and developing systems thinking in practice ‘capability’ (Shah and Reynolds, 2017).

Initially we defined the role of our postgraduate STiP curriculum in terms of supporting 3 nested levels of student engagement (Fig. 1), beginning with an initial sense of recovering systemic sensibilities (appreciating the connectedness of the world) – sensibilities that can get lost in our more systematic traditions of *discipline* learning particularly in the transition from primary to secondary education. The challenge is to recover such sensibilities (seeing the forest through the trees) with an appropriate systems *literacy* that can enable better *capability* of using systems thinking *in practice*. An analogy might be offered with teaching maths. Arguably we have innate sensibilities of quantity over quality which, when nurtured with appropriate maths literacy, can develop a longer term capability to enjoy life with and of numbers. Throughout the development of postgraduate STiP modules since 2009 OU students are required to develop their STiP capabilities using their own chosen situated contexts of praxis - usually aligned with professional areas of practice (Blackmore et al., 2010 [2020]).

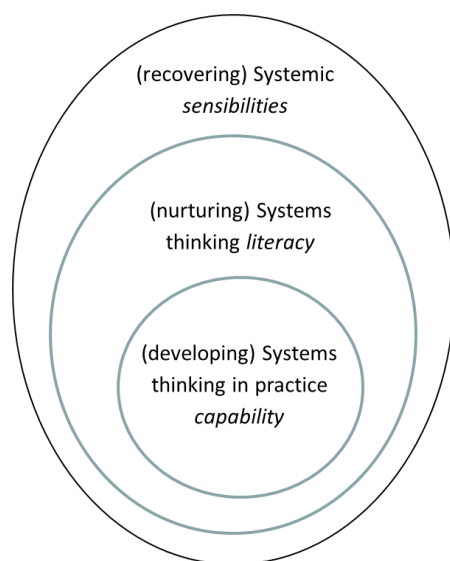


Fig. 1 Nested relationship between systemic sensibilities, systems thinking literacy and systems thinking in practice (STiP) capabilities underpinning the 2020 development of the STiP curriculum (adapted from Ison and Shelly, 2016).

A further development of this mental model of 3 levels was later used as a theory of change for the portfolio module of STPA which itself can be used to represent the STiP curriculum in general.

Box 1 provides a definition of capability developed for the STiP 2020 curriculum (WS-3)

Box 1 Capabilities... Adapted from a glossary item associated with *Making Strategy with STiP* (TB871 - one of the core 30 credit OU modules in the PG Systems thinking in practice curriculum) – coupled with work on principles of STiP (Reynolds, 2024)

Developing capability is an ongoing practice of enabling a purposeful practitioner the freedom (emancipation) to choose reasoned pathways of action that may be different from pre-determined (purposive) systems of action associated with the situation at hand. Such expressions of capability may involve emancipation from others' (extrinsic) definitions of competence (e.g. a 'competency framework') if they choose it to be the right thing to do under the circumstances. Capabilities are, by definition, less easy to frame. They relate to personal learned experiences of applying tools in different circumstances and being able to adapt and adjust to a particular situation by nurturing a wider variety of choices available. For a systems thinking practitioner, the reasoning can be benchmarked according to principles of systems thinking in practice: (i) coupling systemic desirability with more systematic cultural feasibility; (ii) appreciating systems as perspective on the world rather than engineered; and (iii) practising adaptability and revision of systems in changing situations.

Our interest in the notion of capabilities in the workplaces where academic and non-academic staff provide higher education has led us to focus on curriculum praxis.

Curriculum praxis (and capabilities)

Curiously, the distinction between competencies and capabilities in higher education more widely is not one often made; with the two terms more often used interchangeably. Lozano and colleagues hint towards challenges of transforming existing practices of curriculum development based on a prevailing competency framing; with well defined 'disciplined' subject areas, and assessment procedures based on fixed measures of learning outcomes (cf. Lozano et al., 2012). The use of the term 'curriculum praxis' captures more the essence of a capabilities approach to curriculum development.

We define curriculum praxis as **praxis that is concerned with the design and enactment of learning systems**. Below, we first define each of the terms praxis and curriculum separately. Then, we introduce our perspective of curriculum as a learning system. This allows us to elaborate on the purpose of learning and different possible conceptualisations of the components of learning systems in a higher education context.

Practice and Praxis

Praxis has been defined as “theory informed practical action” (Ison, 2017, p.4). According to Kemmis and Smith (2008), praxis is a particular form of practice which arises when a practitioner (systematically) acts with (systemic) awareness that their actions are morally committed, informed by traditions in a field and have historical consequences. Kemmis (2012) develops this emphasis on morally committed action further:

“Praxis is not a matter of following rules or priorities or routines. It is a matter of deliberating in the face of uncertainty about how to act rightly, taking into account moral, social and political considerations, not just prudential questions, and then acting for the good - acting rightly or as one should under the circumstances” (Kemmis, 2012, p. 88)

This focus on acting rightly rather than following ascribed paths resonates with the capabilities approach. Whilst ‘practice’ is synonymous with being systematic, ‘praxis’ invokes a coupling of being systemic with being systematic.

Pedagogy as praxis

Mahon (2014) details different ways in which praxis has been used in relation to education and subsequently focuses on the notion of critical pedagogical praxis as:

“a kind of pedagogical practice that is reflexive, informed and morally committed pedagogical practice that seeks to create spaces (e.g., through teaching and learning interactions) in which harmful or unsustainable practices and power relationships can

be understood and reoriented, and in which new possibilities for action can emerge and be enacted” (Mahon, 2014, p.54)

A related, but broader, concept is that of critical educational praxis which is “a social-justice oriented, educational practice/praxis, with a focus on asking critical questions and creating conditions for positive change” (Mahon, Heikkinen and Huttunen, 2019, p.463). This notion of social justice orientation is particularly pertinent to The Open University given its origins and mission. Its relevance moves beyond those who are directly involved in module production and presentation to the University as a whole, and indeed to all players in the education sector.

Whilst an individual practitioner and their commitment to theory informed, morally committed action is a key element in praxis, it is also important to take into account that the context in which a practitioner works impacts on their possibilities for praxis. Research has identified a number of enablers and constraints for critical pedagogical/educational praxis (**Table 1**) and concluded that it is not flourishing in modern higher educational institutions (Mahon 2014, Mahon, Heikkinen and Huttunen 2019).

Table 1: Enablers and constraints for critical educational praxis (Source: Mahon, Heikkinen and Huttunen, 2019, Mahon 2014)

Enablers	Constraints
• Time – to interrogate practice, to build relationships conducive to critical conversations; to develop understanding of situations; to source and develop resources; to engage in activities needed to act in critically informed ways • Space for creativity – the opportunity to have and explore ideas; fuelled by exposure to diversity • Space for autonomy and flexibility – to exercise professional judgement; to respond appropriately to changing circumstances; to have choices about how to act • Positive, productive, and trusting relationships • Rigorous critical dialogue and reflexive conversations • Opportunity for engagement in scholarly activity in a higher education community	• Intensification of academic work • Lack of, or diminishing, contact time • Over-regulation and standardisation of practice • Promotion of particular constructions of pedagogical practice

Curriculum as praxis

The term curriculum has its roots in the chariot/running tracks of ancient Greece and Rome. The word means the course of a race linked to the verb currere meaning to run. Its use in education has been traced to 1633 when the University of Glasgow coined it to refer to a course of study (Wikipedia, 2021).

According to Smith (2000) four ways of approaching curriculum theory and practice, each with their own strengths and limitations, can be identified:

1. Curriculum as a body of knowledge to be transmitted.
2. Curriculum as an attempt to achieve certain ends in students – product.
3. Curriculum as process.
4. Curriculum as praxis.

The ‘curriculum as praxis’ approach is particularly relevant to our discussion here given that it brings together the terms curriculum and praxis. Grundy (1987) contrasts this with a view of curriculum as a product and emphasises that curriculum praxis is concerned with deliberative judgements and emancipation. Drawing on the work of Freire, Grundy explains:

“the content of the curriculum draws its meaning, not from its ends, but from its beginnings. The substance of the educational experience is a matter of negotiation between teacher and students [...] The negotiated curriculum is neither haphazard nor spontaneous, however. Rather, it emerges from the systematic reflections of those engaged in the pedagogical act.” (Grundy, 1987, p.102-3).

Curriculum as a learning system

Drawing on Systems lineages, our own perspective of curriculum is compatible with, but different to, that of Grundy. We find it useful to think of curriculum as a learning system. This draws on the definition of a system that has been used in OU Systems courses:

A system is

- A collection of entities
- That are seen by someone
- As interacting together
- To do something

(Morris, 2005, cited in Ison, 2017, p.45)

A learning system then “comprises interconnected subsystems, made up of elements and processes that combine for the purpose of learning” (Ison, 2017, p.270 based on Blackmore, 2010). In module production, we act purposefully to design a purposive ‘learning system’ with associated prescribed learning outcomes (‘directive’ first-order learning). However, we also appreciate that the learning system only comes into existence as a student makes choices about how to engage with the resources, activities and assessment (second-order learning). In retrospect, the learning system and the experiences of it will therefore be different for each individual student. It is worth highlighting that we do not limit our use of the term learning system to educational courses. Scholarship and research ‘projects’ can for example also be thought of as learning systems. In addition, organisational strategy making or organisational operations (such as module production processes themselves) can be designed and enacted in a way where learning takes place.

There are two aspects of a learning system in higher education that we would like to elaborate on further - the purpose (Box 1) and the collection of entities.

Box 1 The purpose of a curriculum learning system...competencies or capabilities?

If a learning system is concerned with the purpose of learning, it is important to reflect on what it is that will be ‘learned’. This is contested and is closely linked to debates about what higher education is for. It is common to think of desired learning in terms of the body of knowledge to be transmitted (syllabus) associated with at HE level with desired ends (learning outcomes).

The rising focus on higher education institutions in relation to their role in meeting employers’ needs leads to a focus on developing competences or employability. In apprenticeship degrees, these are captured in formally adopted Knowledge, Skills and Behaviours (KSBs).

Whilst KSBs tend to be driven by professional bodies as gatekeepers of framed ‘competencies’, our own interest as designers and providers of HE curriculum is with crafting learning systems that are concerned with capability development.

Different purposes (viewpoints) of a curriculum raises different questions about what is 'in' a learning system ('collection of entities') and the different roles of higher education institutions, employers and students/apprentices in their design and enactment. Wilding has identified five slightly different conceptualisations of such configurations using different sources of literature: (i) curriculum as emergence from external and internal influences in a socio-cultural context; (ii) curriculum as an interface system mediating between university and employer; (iii) curriculum learning system with a community of practice (CoP) as part of the workplace but separate from university; (iv) curriculum learning system with a CoP as separate from university and workplace and interface system; and (v) curriculum as an integral to lifelong learning system comprising a landscape of practice

Different perspectives can view the dynamics of curriculum development in different ways, drawing on different emphases and positioning of academic and workplace influences. It is not our intention to claim that one conceptualisation is 'better' than the others. They can be more or less useful in different circumstances. Acknowledging these different perspectives and possibilities of varying configurations between elements of curriculum development, we can formulate a research lens using a capabilities approach towards curriculum praxis that serves capabilities development both in students' own workplace and in our own educators' workplace.

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